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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,605	01/24/2002	Toshihiro Takagi	3064IT/50863	4722

7590 08/05/2004

Crowell & Moring, L.L.P.  
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Washington, DC 20044-4300

EXAMINER

YENKE, BRIAN P

ART UNIT PAPER NUMBER

2614

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,605

Applicant(s)

TAKAGI ET AL.

Examiner

BRIAN P. YENKE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 24 April 2002
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Choi, US 6,598,233 and Lee, 6,104,346.

In considering claims 1-2,

The applicant's admitted prior art discloses (background, Fig 5) a receiving system which receives both analog and digital channels and includes an OSD which displays main/sub-channels of the received analog and digital signals. Thus the preamble, along with the claimed control unit, the claimed receiver which receives signals when a channel change is inputted or a tuner (analog/digital) is chosen (i.e. power switch of system is closed), the claimed digital decoder, the claimed display device are all met.

However, AAPA does not disclose the sub-channel including a predetermined descriptor when the sub-channel number cannot be designated.

It is known that the reception of a digital broadcast signal requires more time (i.e. seconds) than an analog broadcast because digital signals are transmitted in a compressed format and in order to display them the compressed signal must be decompressed.

The examiner incorporates Choi, US 6,598,233 which discloses a channel control of a digital television by reducing the time required for channel switching by storing in memory the PID associated with the video and audio signal. Thus Choi reduces the amount of time required for switching between channels since the video and audio PID's are stored on the memory.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify AAPA which discloses receiving both analog and digital signals and displaying the respective major/minor channels associated with each broadcast, with Choi, by reducing the amount of time between channel switching, by storing PID's of a selected channel in memory which provides the user the ability to quickly switch to a previously received/stored channel.

However, neither AAPA nor Choi disclose displaying a predetermined descriptor when channel information has not been analyzed/obtained.

It is known that the number of subchannel programs transmitted/received through each channel can change while a user is watching TV.

Thus the examiner incorporates Lee, 6,104,346 which discloses a system which displays updated subchannel information. Lee discloses that since subchannel programs can change while a user is watching TV, it would be advantageous to inform the user/viewer when a new subchannel program has been received. Lee notifies the user via display (Fig 3, 308), which indicates that a newly added program "news" which is program number "43" has been newly added. Thus the concept of informing the viewer of sub-channel information and any updates/updating is conventional.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify AAPA and Choi which disclose a quick channel switching method by storing previously received/stored channel PID's, with Lee by notifying the viewer of sub-channel information/changes which also include acquisition (i.e. data not previously in memory, but storing---indicating to the viewer "updating").

In considering claim 3,

As stated above AAPA discloses the reception of analog/digital signals along with the major/minor channel information. The claimed power switch of a system is closed is met by a system which includes a tuner(s) where in the event two tuners are used, the tuner selecting/receiving the channel will be closed which also indicates a instruction for a channel change.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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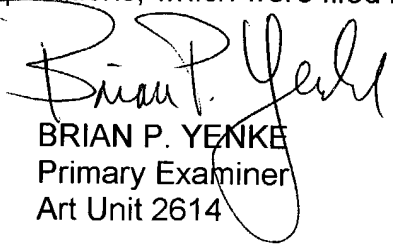
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BRIAN P. YENKE  
Primary Examiner  
Art Unit 2614



B.P.Y.  
02 August 2004